AMENDMENTS TO THE SPECIFICATION

Please replace paragraph beginning on page 2, line 3, with the following rewritten paragraph:

Today, some scanners turn off the scanner light at the end of each scan and other scanners leave the scan light on for extended periods of time. The trade off is the amount of energy used vs. the time it takes to turn on the light and reach a stable scanning intensity. The scanners that leave ~~there~~ their lights on typically start scanning quicker than scanners that have to turn on ~~there~~ their light first before they can scan. Typically the scanners that leave ~~there~~ their light on use the same stored dark current calibration for each scan.

Please replace paragraph beginning on page 3, line 15, with the following rewritten paragraph:

A method for calibrating a scanner that allows the scan to start quickly can enhance the usability of current scanners. A calibration typically corrects for at least three things: dark current, photo-response non-uniformity (PRNU), and lamp intensity profile problems. These three error sources are typically ~~measure~~ measured with two scans. A scan is done where essentially no light is hitting the CCD to measure the dark current. And a scan of a target of a known brightness, done with the light on, is used to measure the PRNU and the lamp profile. For this application, the scan done to measure the PRNU and lamp profile will be called the PRNU scan. Once each of these sources of error are measured, correcting gain factors are stored in memory and used to adjust the gain for the amplifier for each pixel in the CCD array. Some scanners keep the scan light on in-between user scans. These scanners typically only do a dark current scan at power-up and then re-use the stored dark current correction factors. Some of these scanners may redo the PRNU scan before each user scan. This may not be considered a full calibration. For this application a full calibration will consist of both a dark current scan and a PRNU scan.

Please replace paragraph beginning on page 4, line 22, with the following rewritten paragraph:

In one embodiment of the current invention the scanner would do a full calibration some time shortly after the scanner was turned on (see fig 1). The scan head would then be positioned underneath the PRNU reference target. In the preferred embodiment the PRNU reference target would extend far enough such that when the scan head is at the normal starting position for a user scan, the scan head would still be under the PRNU reference target. This would allow the scan head to be positioned in the starting position for a user scan while still being underneath the PRNU reference target. The scanner would occasionally do partial calibration scan 104.

Please replace paragraph beginning on page 5, line 22, with the following rewritten paragraph:

Once the partial calibration scan has been completed the partial calibration scan results are compared to the stored reference calibration scan results 106. If the partial calibration scan has changed more than a preset amount a new full calibration will be done 108. When comparing the reference calibration scan results with the partial calibration scan results, large changes in only a few individual pixels may be discounted. The reason for this is that if the partial calibration scan was done without movement of the scan head, a dust or dirt spot on the PRNU reference target may have a large effect on the results compared to a scan done over a much longer strip of the PRNU reference target. Figure 2 shows an example lamp profile from a PRNU scan where the x-axis is the pixels in the CCD and the y-axis is light intensity or brightness. Figure 3 shows another PRNU scan lamp profile. The difference between the lamp profiles in figure 2 and figure 3 are mostly changes in magnitude. Both lamp profiles have a very similar shape but the lamp profile in figure 3 is brighter or has a larger magnitude. This type of difference between the profiles may optionally be corrected 109 by a change in the global gain 110 or no change may be made. However if the difference in brightness between the two profiles exceeds a given amount a new full reference calibration scan may be done. Figure 4 ~~show~~ shows a third lamp profile. The lamp profile in figure 4 has a different shape than the lamp profiles in figure 2 and 3. This type of change, if large enough, will also trigger a new reference calibration scan 102. The magnitude or brightness difference may be calculated using many different well-known methods, for example the average, the mean, or the minimum difference between the profiles

may be used. The shape difference can also be calculated using many different well-known methods. For example the least squares method, the maximum difference – minimum difference between the profiles, and the cross-correlation method are methods that could be used to determine the differences between shapes.